Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1. (Original) A heat exchanger, in particular an evaporator for air-conditioning systems in motor vehicles, having a number of heat transfer surfaces made from metal, in particular aluminum or aluminum compounds, to which a plurality of layers have been applied, nanoparticles being used for the coating.
- 2. (Original) The heat exchanger as claimed in claim 1, in which each layer contains nanoparticles of different compositions.
- 3. (Currently amended) The heat exchanger as claimed in claim 1 or 2, in which at least one layer has corrosion-resistant properties and at least one further layer, preferably arranged thereon, has hydrophilic properties.
- 4. (Original) The heat exchanger as claimed in claim 3, in which the layer with hydrophilic properties has a wetting contact angle with water of less than or equal to 60°, preferably of less than or equal to 40°.
- 5. (Currently amended) The heat exchanger as claimed in one of claims 1 to 4 claim 1, in which the nanoparticles of organic and/or inorganic compounds of aluminum, silicon, boron and/or transition metals, preferably from transition groups IV and V of the periodic system, and/or cerium dissolved and/or dispersed in inorganic and/or organic solvents are used for the coating.
- 6. (Currently amended) The heat exchanger as claimed in one of claims 1 to 5 claim 1, in which each layer thickness amounts to less than 1.5 μ m or equal to 1.5 μ m, preferably less than 1 μ m or equal to 1 μ m, and in which the total layer thickness amounts to less than 5 μ m or equal to 5 μ m.

- 7. (Currently amended) A process for the surface treatment of heat exchangers, in particular as claimed in one of claims 1 to 6 claim 1, in which a plurality of layers are applied to a number of heat transfer surfaces made from metal, in particular aluminum or aluminum compounds, with nanoparticles being used for the coating.
- 8. (Original) The process as claimed in claim 7, in which the nanoparticles of organic and/or inorganic compounds of aluminum, silicon, boron and/or transition metals, preferably from transition groups IV and V of the periodic system, and/or cerium dispersed and/or dissolved in inorganic and/or organic solvents are used for the coating.
- 9. (Currently amended) The process as claimed in claim 7 or 8, in which the layers are applied by dipping, flooding or spraying, with the individual layers being applied in direct succession without any intermediate drying.
- 10. (Currently amended) The process as claimed in claim 7 or 8, in which the layers are applied by dipping, flooding or spraying, with the individual layers being applied in separate treatment steps in each case with intermediate drying.